

## REMARKS

Claims 5-8 are pending in this application. In this Request for Reconsideration, no claims are amended.

The Office Action rejects claims 5-8 under 35 U.S.C. § 103(a) as being obvious over Soczka-Guth et al. (WO 99/29763) in view of Cavalca et al. (U.S. Published Application No. 2001/0033960) in view of Grot (U.S. Patent No. 5,547,911). This rejection is traversed.

The present claims require an electrolyte membrane/electrode assembly comprising an electrolyte membrane, an air pole and a fuel pole, all including a polymer ion-exchange material; and the ion-exchange capacity and the dynamic viscoelastic modulus of the entire electrolyte membrane/electrode assembly falling within specified limits.

The Office Action asserts that "the artisan would be motivated by the disclosure of Cavalca et al. to incorporate a polymer ion-exchange component into the electrodes of Soczka-Guth et al. "(see the fourth paragraph on page 3 of the Office Action).

It is noted that Soczka-Guth et al. specifically require a membrane made of non-perfluorinated material. Nowhere does Soczka-Guth et al. teach or suggest using such non-perfluorinated material for electrodes.

In fact, Applicants respectfully note that Soczka-Guth specifically teach that "the usability of non-perfluorinated materials is frequently still disputed in the current literature" (column 1, line 34-35, emphasis added). Thus, based on this teaching in Soczka-Guth, Applicants respectfully submit that it would not have been obvious to one of skill in the art, that non-perfluorinated materials, such as those specifically used only

for membranes in the teachings of Sockza-Guth, could also have been "usable" in electrodes, as apparently asserted in the Office Action.

Furthermore, Sockza-Guth specifically teach against the use of perfluorinated or partially fluorinated polymers bearing sulfonic groups, stating the "membranes comprising these polymers are, owing to the fluorination steps necessary for the monomers, expensive and, in addition, are difficult to process" (column 1, lines 17-19).

In clear contrast, all of the relevant examples in Cavalca et al. appear to be directed to fluorinated polymers. For example, Cavalca et al. specifically describe a membrane "preferably made of one or more fluorinated polymers, and mixtures of perfluorinated polymer and fluorinated ion exchange resin" (see Paragraph [0130]).

Thus, Applicants respectfully submit that: 1) one of skill in the art would not have been motivated to combine the non-fluorinated polymer related teachings of Soczka-Guth with the fluorinated polymer teachings of Cavalca et al.; 2) it would not have been obvious that the teachings of Cavalca et al. regarding the inclusion of fluorinated polymers in electrodes would have worked with non-fluorinated polymers, particularly as Soczka-Guth teach that the usability of non-fluorinated polymers is disputed; and 3) there is no suggestion in the art that the inclusion of non-fluorinated polymers in electrodes would work.

Grot fails to teach or suggest the non-fluorinated polymers would have been effective in electrode materials.

Thus, as one of skill in the art would not have combined the teachings of the cited references in the manner asserted in the Office Action, it is respectfully submitted that a *prima facie* case of obviousness has not been established.

For at least the above reasons, reconsideration and withdrawal of the rejections  
under 35 U.S.C. § 103(a) are respectfully requested.

Applicants respectfully submit that this application is in condition for allowance and such action is earnestly solicited. If the Examiner believes that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number listed below to schedule a personal or telephone interview to discuss any remaining issues.

Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, making reference to Attorney Docket No. 107348-00127.

Respectfully submitted,



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